



WORKPLACE SAFETY AND HEALTH IN RHODE ISLAND

*From The
National Institute for Occupational Safety and Health*



State Profile 2002

*Delivering on the Nation's promise:
Safety and health at work for all people through prevention.*

The National Institute for Occupational Safety and Health

NIOSH is the primary federal agency responsible for conducting research and making recommendations for the prevention of work-related illness and injury. NIOSH is located in the Department of Health and Human Services in the Centers for Disease Control and Prevention. The NIOSH mission is to provide national and world leadership to prevent work-related illness, injury, disability, and death by gathering information, conducting scientific research, and translating the knowledge gained into products and services. As part of its mission, NIOSH supports programs in every state to improve the health and safety of workers. NIOSH has developed this document to highlight recent NIOSH programs important to workers and employers in Rhode Island.

The Burden of Occupational Illness and Injury in Rhode Island

- In Rhode Island, there are approximately 484,000 individuals employed in the workforce.¹
- In 2000, seven workers died as a result of workplace injuries.²
- In 1999, the most recent year for which data are available, the rate of fatal workplace injuries was 2.3 deaths per 100,000 workers—below the national average rate of 4.5 deaths per 100,000 workers.²
- In 2000, there were 22,600 nonfatal workplace injuries and illnesses in Rhode Island.³

The Cost of Occupational Injury and Illness in Rhode Island

In 2000, the most recent year for which data are available, a total of \$122.3 million was paid for workers' compensation claims by Rhode Island private insurers, self-insured employers, and state funds.⁴ This figure does not include compensation paid to workers employed by the federal government and also underestimates the total financial burden for private sector businesses, since only a fraction of health care costs and earnings lost through work injuries and illnesses is covered by workers' compensation. Chronic occupational illnesses like cancer are substantially under-reported in workers' compensation systems because work-relatedness is often difficult to establish.

How NIOSH Prevents Worker Injuries and Diseases in Rhode Island

Health Hazard Evaluations (HHEs) and Technical Assistance

NIOSH evaluates workplace hazards and recommends solutions when requested by employers, workers, or state or federal agencies. Since 1993, NIOSH has responded to 28 requests for HHEs in Rhode Island in a variety of industrial settings, including the following example:

Providence, Rhode Island: Exposure to Paper Dust at a Post Office

In June 2000, NIOSH received a request for an HHE at a post office in Providence, Rhode Island, to evaluate several hazards including paper dust and exhaust fumes with potential health effects such as asthma and pneumonia. The Providence area office of the U.S. Occupational Safety and Health Administration (OSHA) had conducted an investigation at the facility earlier that year and had not found a violation of its dust standard but had encouraged the use of dust controls, including more frequent cleaning. NIOSH recommendations to management included encouraging the control of paper dust accumulation in the building to prevent microbial growth and, since exposure to engine exhaust is associated with acute health effects, having U.S. Postal Service environmental health professionals or an OSHA compliance officer investigate the complaint of exhaust gases.

Pawtucket, Rhode Island: Flock-Worker's Lung Disease

In 1996, NIOSH responded to a request for an HHE following recognition of a cluster of work-related lung disease among workers at a Pawtucket plant that produces nylon flock and nylon-flocked upholstery fabric that resembles velvet. Flock itself is considered too large to be inhaled into deep airway and alveolar regions of the lung, and the company was not aware that the processes used at the plant were generating smaller dust particles. NIOSH measured excessive levels of respirable dust in some work areas, including the flocking rooms. A NIOSH medical survey found a prevalence of work-related symptoms that were significantly associated with hours worked per week, with work on the flocking ranges, and with the workers' use of compressed air to remove loose flock from equipment. NIOSH also found that fiber-shaped nylon shreds of respirable size were a notable component of the dust and that airborne dust from the plant caused marked lung inflammation in rats, as did lab-generated shreds of nylon in the absence of other components of flock. The HHE report communicated these findings along with recommendations on how to reduce worker exposure to respirable dust at the facility. This HHE helped identify a new type of disease, "flock-worker's lung," and has stimulated substantial research and prevention activity, not only within the flock industry, but also within the much larger synthetic organic manufacturing industry.

Building State Capacity

State-Based Surveillance

NIOSH funds the Adult Blood Lead Epidemiology and Surveillance Program (ABLES) in the Rhode Island Department of Health. Through ABLES, the agency's staff can track and respond to cases of excessive lead exposure in adults which can cause a variety of adverse health outcomes such as kidney or nervous system damage and potential infertility.

Extramural Programs Funded by NIOSH

In fiscal year 2002, NIOSH is funding surveillance and associated activities to evaluate and reduce occupational injuries, illness, and hazards in Rhode Island through the Occupational and Environmental Health Center of Rhode Island in Providence.

Additional information regarding NIOSH services and activities can be accessed through the NIOSH home page at <http://www.cdc.gov/niosh/homepage.html> or by calling the NIOSH 800-number at 1-800-356-NIOSH (1-800-356-4674).

¹U.S. Department of Labor (DOL), Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics, Current Population Survey, 2000.

²DOL, BLS in cooperation with state and federal agencies, Census of Fatal Occupational Injuries, 1999-2000.

³DOL, BLS in cooperation with participating state agencies, Survey of Occupational Injuries and Illnesses, 2000.

⁴National Academy of Social Insurance, *Workers' Compensation: Benefits, Coverage, and Costs, 2000 New Estimates*, May 2002.